

What is Claimed Is:

1. Apparatus suitable for manipulating flow characteristics within a blood vessel, the apparatus comprising:

a catheter having proximal and distal ends, a distal inlet port, a lateral surface, and a lumen extending between the proximal and distal ends;

an occlusive member affixed to the distal end of the catheter; and

at least one intake port disposed in the lateral surface proximal to the occlusive member, the blood intake port configured to induce venturi-assisted retrograde flow in a treatment vessel via the distal inlet port.

2. The apparatus of claim 1 wherein the occlusive member is inflatable and includes a tapered surface that communicates with the lumen.

3. The apparatus of claim 2 wherein the occlusive member is adapted to be disposed within the ostium of a treatment vessel.

4. The apparatus of claim 2 wherein the occlusive member further serves as an inflatable cuff.

5. The apparatus of claim 1 wherein the occlusive member comprises a self-expanding woven mesh having a contracted state suitable for transluminal insertion and an expanded state suitable for occluding antegrade flow in a treatment vessel.

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internal lip.

7.  
occlusive membrane  
coated with a

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comprising:  
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within the catheter  
a flexible member  
to the piston  
catheter, so  
the catheter  
balloon-shaped

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state wherein the proximal edges of the blood intake ports are raised with respect to the catheter body.

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VA1) [ 13. The apparatus of claim 1 wherein the blood intake port is circular.

14. The apparatus of claim 1 wherein the blood intake port is a slot.

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VA1) [ 15. The apparatus of claim 1 wherein the catheter further comprises a flexing member that separates a distal catheter section comprising the distal occlusive member and a proximal section comprising the blood intake port.

16. The apparatus of claim 15 further comprising a shape memory member having an expanded state suitable for bending the flexing member to form a substantially acute angle between the proximal and distal sections.

17. The apparatus of claim 1 further comprising:

an outer sheath; and

a hood, the hood being provided in a contracted state within the outer sheath and having an expanded state suitable for guiding blood flow into the blood intake port.

18. A method for removing emboli during a medical procedure and manipulating flow characteristics in a treatment vessel, the method comprising:

providing apparatus comprising a catheter having proximal and distal ends, a lumen extending





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28. The method of claim 27 further comprising proximally retracting a tensioning member affixed to a distal point within the lumen to bend the flexing member to increase the substantially acute angle.

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.